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TITLE OF THESIS... Minimums Used by Consumers to Evaluate Foods and the Food Marketplace

UNIVERSITY... University of Alberta

DEGREE FOR WHICH THESIS WAS PRESENTED... M.Sc.

YEAR THIS DEGREE GRANTED... 1976

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THE UNIVERSITY OF ALBERTA

DIMENSIONS USED BY CONSUMERS TO EVALUATE FOODS AND THE FOOD MARKETPLACE

by

Heather Jean Martin (C)

A THESIS

SUBMITTED TO THE FACULTY OF GRADUATE STUDIES AND RESEARCH

IN PARTIAL FULFILMENT OF THE REQUIREMENTS OF THE DEGREE

OF MASTER OF SCIENCE

IN

FOODS

SCHOOL OF HOUSEHOLD ECONOMICS

EDMONTON, ALBERTA

Spring, 1976

THE UNIVERSITY OF ALBERTA

FACULTY OF GRADUATE STUDIES AND RESEARCH

The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies and Research, for acceptance, a thesis entitled Dimensions Used by Consumers to Evaluate Foods and the Food Marketplace, submitted by Heather Jean Martin in partial fulfilment of the requirements for the degree of Master of Science.

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Date: January 28 / 1976

ABSTRACT

A qualitative, exploratory study was conducted to determine the dimensions of foods and the food marketplace considered by consumers in their evaluative thought processes. The study was intended to obtain a list of dimensions which could be quantitatively analysed in further study. Forty-one dimensions of foods, 32 dimensions of food stores, and 16 dimensions of sections of food stores were obtained in the study. These represent a series of consumer concepts, as opposed to researcher concepts, which may now be quantified for further application. No information was obtained regarding the prevalence of use of each dimension by consumers, the relative importance of the dimensions, or their patterns of interaction in governing food choices.

ACKNOWLEDGEMENT

The author is indebted to Dr. Michael F. Stiles for his assistance in this research project and for his valuable contributions to the overall graduate program. Appreciation is also extended to Mr. W.T.P. MacLean for his assistance in the development of the questionnaire and in the use of computing facilities.

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Chapter I. INTRODUCTION

At the Alberta Conference on Challenges in Food Marketing 1974, Mr. Bob Dowling, then Minister of Consumer Affairs in Alberta, stated that "consumerism has grown from outright spokesmen to an institution itself." Commenting on the role of consumers in the development of a healthy marketplace, he said that "the most effective disciplinary force in the marketplace will be the consumers. The better informed the consumers, the better they will be able to fulfill this disciplinary role" (Dowling, 1974).

Mr. Dowling's statements reflect a growing recognition of the importance of the consumer element in our economy and the need for education and information for consumers. Government departments which focus on consumer affairs now function in Canada at both the national and provincial levels. Public media have responded in full measure. Television has given prime time to consumer programs, such as CBC's Marketplace. CBC radio has established a Consumer Affairs Department, and Consumer Consultants are on staff at some individual stations. Newspapers have given front page coverage to consumer issues, for example, the controversy over the microbial quality of ground beef. In the latter case, an Edmonton newspaper, the Journal, and CBC television's "Marketplace" hired scientists to evaluate

ground beef quality in Canadian supermarkets, rather than simply reporting studies from other sources.

Keeping pace with media and government is the food industry, in its recognition of the need to communicate with consumers about their food and nutrition concerns. In a forecast for the future of food marketing, R.B. Rhodes (1974), representing General Foods (Canada) Limited, noted the need for use of more sensitive techniques to determine consumer wants, attitudes and expectations, so that industry can be more responsive to consumers. In the last five years, the Institute of Food Technologists (U.S.A.) has focused on consumer issues at all of their annual conventions. The theme of the 1974 convention, "More Rapport in '74--Consumer, Industry, Government," is indicative of their concern for communication with the public sector. Similarly, the Canadian Institute of Food Science and Technology has become more attentive to consumer issues. In their efforts to assume a more active role in educating consumers, they have made consumer information available in pamphlet form and co-operate with the Institute of Food Technologists (U.S.A.) in their consumer information program.

The present interest and efforts to educate consumers about foods and nutrition have been carefully scrutinized by those who support the need for such programs: consumer advocates and interested professionals. There has been concern that consumer programs are ineffective because they

are not sensitive to the needs of modern consumers and have not been as effective as commercial advertisers in influencing food choices. In an address to nutrition educators, Manoff (1974) said that he suspects that "people are not listening as hard to you as they are to others (food marketers) and that maybe they are eating to the rhythm of another drummer."

Ritchie (1967) stated that "it is customary to confuse the terms teaching and learning. Many teachers believe that if they teach something about a subject, the audience automatically learns....Learning is a personal matter and people learn only when they want to. They either learn in order to satisfy some need which they recognize consciously or subconsciously, or to avoid some nuisance or unpleasant situation which would occur if they had not learned."

In a report to the Minister of the federal department of Consumer and Corporate Affairs, the Canadian Consumer Council (1972) stated that "consumer education should be regarded as a process of learning in response to the expressed needs of consumers, rather than as a product offered by experts who define what consumers ought to know." In their survey of consumer education courses in Canada, they noted that "only infrequently were courses designed around what participants themselves believed to be relevant to them as consumers."

Consumer educators are not alone in their concern that their programs relate to the real needs of their audience.

It has long been recognized by traditional educational authorities that the learning process depends on the learner's own motivations and perceptions of his educational needs. Pine and Horne (1970) pointed out that "unless what is being taught has personal meaning for the individual he will shut it out from his field of perception. People forget most of the content 'taught' to them and retain only the content which they use in their work, or content which is relevant to them personally."

Food and nutrition educators have a particular need to recognize the personal meaning of their subject to the individual, on account of the complexity of psychological connotations associated with food. These symbolic meanings are initiated immediately after birth, when the mother assumes her nurturance role with the infant, and feelings of love, warmth, security, and affection arise from the feeding act (Livingston, 1971). Ritchie (1967) observed that "the regular institution of meals not only serves to satisfy hunger but to give pleasure; and it constantly reinforces the common bond and mutual dependence and loyalty between the members of a family or a group, and reaffirms the status and role within the society of the various people sharing the meal."

Societies, and social elements within societies, are differentiated by their cultural attitudes toward food. Food is a focus of emotional associations between people, a channel for interpersonal communications and sharing, and an

important factor in one's self-identity (Fathauer, 1960).

Personality traits have been associated with food intake throughout history and across all cultures. This association gave widespread appeal to one of the North American catch phrases of this decade: "You are what you eat." This phrase grew out of the health foods movement, and was used as a title for a book by Victor Lindlahr. There are several examples of associations of personality traits with foods in North America: energy, activity, agression and masculinity with eating beef (Moore, 1957); cowardliness and "sheeplike" qualities with lamb (Dichter, 1964); and love and affection with fruits--the apple for the teacher, the eulogies of the grape, and the peaches and cream compliment (Moore, 1957). Fruits also express accomplishment in the phrases "fruition" and "bearing fruit," whereas "vegetate" and "vegetation" have a very different connotation (Moore, 1957).

Vegetarianism is an example of a food-centred cultural practice which reflects this connotation. Vegetarians restrict their intake of animal food and associate this with non-violence, spiritual balance and improved mental function (Dwyer, et al., 1974).

Unfortunately, the symbolic meanings of food have no clearcut pattern. The same foods assume different meanings under different circumstances, and interact with practical considerations such as cost and availability.

It becomes clear that food and nutrition information

cannot be offered to the public in a vacuum. The educator must recognize that strong attitudes and values are already present. While consumers may express definite dissatisfactions with the food marketplace or with their own abilities to choose and prepare foods, the educator will not be likely to alleviate dissatisfactions simply with direct answers to their questions.

The recent interest in hamburger quality is an example of an issue for which consumers require more than a factual reponse. McFadyen (1972) found that "healthfulness" of beef was a matter of concern to consumers. "Healthfulness," as perceived by consumers, was found to be related to fat content, tenderness, suitability for serving to guests, and degree of processing of meats. Any education program which attempts to deal with the consumer's image of healthfulness in beef in the marketplace would have many more issues to confront than simply stating the healthful qualities of the meat supply.

The concern expressed by the Canadian Consumer Council (described earlier) is of pre-eminent importance in assessing the effectiveness of consumer programs. The problem of the "expert" defining the objectives of the program with little understanding of the consumer's conceptual framework is one which cripples educational efforts. Metzen (1967) studied topics in foods and nutrition considered important by consumers, as opposed to topics considered important by professionals. He found that

experts gave high rankings to information portraying general principles and broad applications, such as buying principles applicable to most foods. Consumers, however, gave high rankings to topics with clearly defined immediate applications, such as knowing how to judge the quality of fresh fruits, vegetables, and meats.

Shuptrine, Pruden, and Longman (1975) illustrated a similar perceptual difference between attitudes of business executives and consumers toward the marketplace and consumer activism. From their studies they concluded that "it is reasonable to assume that the perceptions, values, and expectations of executives may make up a different conceptual framework than the consumer's buying and consuming framework. This conclusion suggests that business executives have to carefully determine consumer perceptions and expectations and not use their own perceptions and values when making business and marketing decisions." Information about consumers is valuable to two elements: educators and marketers.

Faced with the task of designing educational programs with little or no information about their audience, educators may consider using consumer complaint data to identify the nature of consumer problems and to formulate policies. In Canada, many thousands of consumers contact government agencies, the Better Business Bureau, and newspapers and magazines for assistance in solving their problems. Liefeld, Edgecombe, and Wolfe (1975) studied the

demographic characteristics of Canadian consumer complainers. They found that 'complainers' are middle-aged, well-educated, high income, managerial/professional, and married consumers. "These consumers may not be those whose needs are greatest or who receive unequal or unjust treatment in the marketplace....It seems unlikely that the consumer problems of the affluent and well-educated are similar to those of the poor and uneducated because they purchase greater numbers, different types, and higher unit value goods and services (Liefeld, Edgecombe, and Wolfe, 1975). In establishing programs to meet the needs of the general public, complaint data can be misleading.

Green (1975), in her study of consumer education programs in Edmonton, Alberta, noted that policies were formulated using both consumer requests and the professional's own concepts of the area of need. The educational agencies which participated in this study indicated that their principal contact was with middle and upper socioeconomic groups, and that low income and low education consumers, working persons, the elderly, and ethnic groups were not being reached. Again, the danger of basing policy on the vocal minority is exemplified, and the ineffectiveness of programs designed to meet only the objectives of the expert has already been discussed.

Statement of Objectives

The objective of this study is to explore the conceptual framework used by consumers to evaluate foods and the food marketplace. The study will outline the dimensions of foods and the food marketplace which interact to influence food choices by consumers. This research will be qualitative, that is, it will describe the dimensions, and will not evaluate the prevalence of their use by consumers, their relative importance, nor their patterns of interaction in directing consumer choices. The experimental design will be such that the results of this study will be amenable to a subsequent study of the prevalence, importance, and interaction of the dimensions.

It is intended that such investigation of consumers' perceptions of foods and the food marketplace will be useful to consumer educators and food marketers in designing educational and promotional programs which are meaningful to consumers in terms of their own attitudes and values.

Chapter II. LITERATURE REVIEW

The literature quoted in this review will include only those studies which are empirical in nature, and report experimental evidence for their conclusions. The works discussed in the foregoing Introduction are primarily descriptive in nature and are founded on the opinions of those who are experienced in dealing with food and nutrition problems.

Previous studies which document the conceptual framework of the North American consumer are limited, although a great deal of effort has been devoted to study of food habits and consumption patterns (Wilson, 1973). The intricacies of food habits and their interrelations with cultural, social, and psychological factors probably led to identification of the need to understand the underlying reasons for food choices.

Most empirical studies reported in the literature measure the response of the sample to topics chosen by the researcher. Researchers define the research problem as they conceptualize it. Frost and Braine (1967) noted that determination of what is to be measured and how it is to be defined is often made following a subjective assessment of existing data, which is frequently incomplete. In this study, where there is little background information about the conceptual processes of consumers with regard to foods and the food marketplace, it is particularly dangerous to

apply the researcher's conceptual framework to the research design. At the stage of data analysis, the researcher cannot compensate for the omission of important consumer concepts or the inclusion of researcher concepts which are irrelevant to consumers.

Food attitudes are influenced by many emotional and social factors. These factors are generally not amenable--even voluntarily--to conscious recognition by the individual (Livingston, 1971). Wentz (1972) warned that objective techniques, where the researcher simply asks direct questions and accepts the answers at face value, are not reliable when the respondent's emotions and self-image are involved in the answers. Triandis (1971) elaborated upon the disadvantages of direct questions: "When the subject is aware that he is being studied, he is likely to modify his responses in order to (a) please a respected experimenter; (b) make trouble with the study of a disliked experimenter; (c) appear open-minded or 'enlightened'; (d) give a good impression, and so forth." The researcher cannot rely on obtaining accurate answers by asking direct questions such as "What is imporant to you in choosing foods?" or "Do you consider food safety and wholesomeness important in choosing foods?"

Overall, it seems that studies of consumers' perceptions about foods are limited by three factors: their number, their failure to identify consumer-defined dimensions rather than simply studying researcher-defined

dimensions, and their use of direct rather than projective techniques.

In a study of the connotative meanings of food, Fewster, Bostian, and Powers (1973) measured responses to connotations of foods which were predetermined by the researchers. They chose twelve major categories of meaning by a review of literature in nutrition, social psychology, and anthropology. The twelve categories are as follows:

economics
food value
convenience
communications concerning intrapersonal, interpersonal, and mass communication
health needs
health apprehensions
aesthetic-sensory perceptions such as appearance, aroma, flavor, satiety
symbolism such as security, tradition and custom, reward and punishment, traditional and innovative
age-group differences
status-group differences
sex differences
communication behavior concerning information needs and sources, and personal and group differences

For each of these twelve categories of meaning, the researchers selected pairs of polar adjectives which would reflect the meaning to the respondent. For example, among those selected to represent "perceived health apprehensions" were: "leads to high blood pressure - does not lead to high blood pressure," "causes allergy - does not cause allergy," and "brings on heart disease - does not bring on heart disease." The authors did not state the method used to choose these polar adjectives, nor did they report empirical evidence that the twelve categories of meaning represented the cognitive processes used by consumers to evaluate foods, nor that the polar adjectives chosen are those normally verbalized by consumers in communications about foods. While the results of this study are meaningful in their description of consumer response to connotations of foods which were deemed important by the researchers, they do not necessarily represent the realm of connotations of foods which interact in consumers' cognitive processes.

Warland and Herrmann (1971) studied beliefs about imitation foods and motivations for their use. Respondents were asked to compare the relative merits of certain imitation products to the natural forms of the foods. For example, margarine was compared to butter, coffee whiteners to cream and milk, "substitute" milk to milk, and soy protein meat substitute to meat. The response to these comparisons was considered to represent the consumer's image of imitation food products. The comparisons were made on

dimensions which were predetermined by the researcher: price, caloric content, vitamin and mineral content, cholesterol content, convenience and taste preference. While the image profile developed by these researchers may represent consumers' beliefs about these six dimensions, the importance of each dimension in its contribution to the overall image of imitation foods is not known. Further, it is not known whether all dimensions of the consumers' image profile are represented in the study.

Ikeda (1975) studied nutrition information needs as perceived and expressed by low income homemakers. Data were gathered by personal interviews which combined open-ended questions with a structured ranking question. The author stated that "the open-ended questions do not prestructure the breadth of response but elicit what first comes to the person's mind." This represented an attempt by the author to avoid prejudiced responses. Nevertheless, the open-ended questions used in the study named the topic under discussion, rather than inspiring respondents to volunteer topics. The technique was direct, rather than projective. The authors reported two topics to be of most interest to homemakers: food preparation, and general questions on nutrition.

Elwood (1975) documented nutritional concerns of the elderly by recording the questions asked by elderly persons attending health education programs offered to 38 different elderly groups in 30 States by the National Retired Teachers

Association-American Association of Retired persons. The participants asked a total of 370 questions pertaining to nutrition during the various sessions. The questions were recorded for use by resource persons in designing further education programs. These questions were considered to represent "concerns" of the elderly regarding nutrition. The author suggested that "such concerns should serve as a reasonable basis for developing a core of sound information directed toward the special needs of this age group."

Another study of consumer "concerns" was reported by Green (1975), in this case not limited to those of the elderly. She stated that awareness of factors of concern is considered a prerequisite to providing adequate consumer information and education, and directing product development and advertising. Nine categories of concern were identified in the response of subjects to the question "Is there anything about food or shopping today that causes you concern?" Prices, packaging, quality, processing, additives, nutrition, advertising, labelling, and safety were the categories reported by Green. She also reported that food ingredients and pork were cited as concerns in response to other questions in the interview schedule.

Market researchers have given considerable attention to consumers' perceptions and evaluations of food products, for the purpose of developing marketing strategies. Such research is of limited applicability to this study for two reasons: (1) It concentrates on the creation of a consumer

profile for single food items. Each tends to be studied in isolation from all other items, which limits the generalization of this data to foods as a whole.
(2) Special attention is paid to brand identity, forms of packaging, labelling and advertising, as these differentiate between the marketing strategies of competing products. This research focus may overlook other aspects of foods which are applicable to the general study of foods.

The present study will complement the studies cited in this review by determining the dimensions of foods and the food marketplace which interact in the conceptual processes of consumers, and influence attitudes toward food. There will be a deliberate endeavor to avoid any imposition of the researcher's conceptual framework in the elicitation of responses and their subsequent analysis. The dimensions sought will not be limited to concerns or misconceptions or those relevant only to informational needs.

Chapter III. METHODOLOGY

I. THEORY

The research instrument used in this study is based on the repertory grid technique. This a projective test, designed to surface information about the respondents' thought processes without asking direct questions. Respondents receive a minimum of directional guidance from the person administering the test (Frost and Braine, 1967).

The technique was developed by Kelly (1955), a psychologist who was seeking an effective clinical test to assess the therapeutic needs of his clients. Frost and Braine (1967) stated that the validity of the test is high, primarily because of the sound theoretical framework from which it was developed. Knowledge of the underlying theory is essential to successful application of repertory grid technique. Frost and Braine (1967) pointed out that "attempts to use the technique mechanically and without reference to the theory would undoubtedly meet with only limited success."

As a result, a brief description of Personal Construct Theory is given here, in order that the reader who is unfamiliar with repertory grid technique may understand its use and application to the field of foods and nutrition. A more detailed description is given by Bannister and Mair

(1968), Bannister (1962), or Kelly (1955).

Personal Construct Theory

The basis of the theory is that psychological processes operate in a network of pathways and are not random. An individual organizes his thought processes by first noting the characteristics of events or objects in his world. As these events or objects are encountered repeatedly during life, the individual predicts their nature on the basis of the complex pattern of characteristics he has previously observed. The individual thus has a predisposition toward any event or object--a mental concept of the pattern of characteristics previously experienced.

These characteristics are necessarily bipolar (Bannister and Mair, 1968) since both similarity and contrast will be observed in events and objects. "A person cannot be seen as intelligent without this implying some construed similarity between this person and others who show similar characteristics and some contrast with characteristics shown by stupid people" (Bannister and Mair, 1968).

Kelly named these bipolar characteristics "constructs," defined formally as patterns created by the individual to organize the realities of the world and to chart a course of behavior. The multitude of constructs used to describe any

one event or object are organized into a system of constructs, where some constructs may form a sub-ordinate group under one super-ordinate construct. For example, a super-ordinate construct for foods, "good - bad," may subsume the constructs "inexpensive - expensive," "easy to prepare - difficult to prepare," "looks appetizing - looks unappetizing," etc., all organized in a hierarchy related to the "good - bad" dichotomy. This complex system of constructs represents the conceptual framework in which the person views the universe of foods.

II. REPERTORY GRID TECHNIQUE

The repertory grid test, based on personal construct theory, was designed to improve the effectiveness of the therapeutic programs of psychologists. The objectives of Kelly's test are strikingly similar to the objectives of researchers in the field of foods and nutrition who wish to understand and communicate effectively with consumers.

Kelly (1955) said "the first function of a test which is to be used in a clinical setting is to define a client's problem in usable terms." Usability, here, refers to the practical application of the information given by the test, and the requirement that the problem be easily understood by both client and therapist. As outlined in the Introduction to this study, the terms of reference used by consumers are not well understood in the field of foods and nutrition. Communication can be impeded by the difficulty of defining food and nutrition problems in terms which are meaningful to consumers. For example, present concern about the effectiveness of Canada's Food Guide and its interpretation by consumers (McClinton, Milne, and Beaton, 1971), centres around the apparent inability of the current guide's food classifications to describe adequately all foods eaten. The food classifications are not designed in a manner which is representative of actual consumption patterns, and therefore it is difficult for consumers to apply the guide to their

own eating habits.

The second function of Kelly's test is "to reveal the pathways along which a client is free to move" (Kelly, 1955). In a given situation, an individual evaluates alternative forms of behavior and makes a choice. An understanding of the individual's evaluation processes allows the communicator to design a message so that it advocates actions which are acceptable to the client. In the field of foods and nutrition it is useless to prescribe or market a dietary change if it contravenes strong values held by the client, such as religious beliefs, social customs, or financial restrictions. The complexity of food symbolism (discussed in the Introduction) makes food values more difficult to predict than other kinds. This emphasizes the importance of prior knowledge of food values to the communicator.

Another function of the test which Kelly sought to develop, which is also important to this study, is "to reveal those resources and problems of the client which might otherwise be overlooked by the therapist" (Kelly, 1955). He pointed out that a good deal may be "wrong" with a client without impairing the ability to get along in the world, and the therapist can easily overlook those aspects of a person's character which may, in fact, be assets. On the other hand, there may be problematic issues unknown to therapist or client which feature prominently in the client's thought processes. It is important that the

test elicits these issues without relying upon the therapist to ask for them directly. In this sense the test must be projective or indirect, rather than direct.

The importance of eliminating researcher bias from study of consumers' conceptual processes was discussed in the Literature Review. In that chapter, it was also noted that topics which involve status and emotional factors require research techniques which surface these factors without the respondent being aware of it. Kelly's test, called the repertory grid technique, fulfills both of these requirements and is considered particularly suitable as a research tool for this study.

Repertory grid technique was designed to reveal the "repertory of constructs" which are used to structure an individual's thoughts. The method has been used to study films (Carver, 1967), paintings (Mair, 1966), inanimate objects (Bannister and Salmon, 1966), emotions (Fransella and Adams, 1965), problem situations in a person's life (Kelly, 1955), types of bread (Jones, 1963), job categories and employers (Triandis, 1959), beef (McFadyen et al., 1973), television programs (Frost, 1969), and in development of product profiles for marketing (Frost and Braine, 1967). The technique is used in this study to reveal the repertory of constructs used by consumers to appraise foods, and the food marketplace. For the remainder of the thesis, constructs will be referred to as the dimensions used by consumers to evaluate foods and the food marketplace. This

terminology will be more meaningful to food and nutrition communicators than the word "construct," which is a psychological term.

The technique consists of presenting the respondent with several cards on which are written the elements of the universe which is to be studied. For example, a study could be made of the universe of drive-in theatres in Edmonton. There are nine elements: Belmont, Golden West, Parkland I, Parkland II, St. Albert, Sherwood, Sky-Vue, Twin One and Twin Two. The names of these drive-ins (the elements) are written on individual cards. These cards are turned face down, and the respondent is asked to make a random draw of three cards. These three cards are turned face up and the respondent is asked to tell some important way in which two of the elements are similar, but different from the third. For example, two of the drive-ins could be said to have good snack bars, while the other has a poor snack bar. Thus the construct "good snack bar - poor snack bar" is revealed as one of the dimensions used by theatre-goers to evaluate drive-in theatres.

The respondent is asked to continue giving other ways in which two of the drive-ins are similar but different from the third. When no further responses can be given for that triad of drive-ins, the cards are replaced face down with the others, or set aside, and a second random draw of three cards is made. The draws are continued until no new responses are given. The interviewer records all responses.

III. QUESTIONNAIRE

The complete questionnaire is given in Appendix A. The considerations made in the development of the questionnaire are given below.

A. Section on Marketplace

1. Food Stores

Respondents were first asked to name all stores where they buy food. These were recorded by the interviewer on separate cards. Triads were then drawn at random by the respondent, as described for repertory grid technique.

2. Sections of Food Stores

Twelve sections of the stores were included to represent the universe of sections. Ideally, all elements of a universe should be included, and this is readily feasible when the universe is composed of a limited number of elements, as exemplified by Edmonton drive-ins, of which there are only nine. Sections of a food store, however, are not well-defined, nor are they limited in number. Because it is not known how consumers conceptualize sections of a food store, the sections to be included in the study were determined by a telephone survey. Twenty respondents were asked to

name all of the sections of the food store that they could think of. Those that were named most frequently were chosen for inclusion as elements of the universe of sections (see Table 1). In addition, the checkout area was included on the basis of researcher interest. McFadyen (1974) in a study of shopping habits, showed the checkout area to be the greatest source of dissatisfaction in food stores.

Repertory grid technique was applied to the sections of the store in the same fashion as was used for the food stores.

B. Section on Foods

Since there are as many as 10,000 different items available to consumers in Edmonton food stores, it was not possible to include all elements of the universe of foods in the repertory test. A smaller number of elements had to be chosen to represent the larger universe.

In previous studies which used repertory grid technique, repondents were asked to name the elements. Kelly (1955), in his study of the psychological processes of clients, gave each subject a list of role titles which represented the people and relationships which may have been

Table 1. Sections of the store included in the questionnaire.

checkout area

cereals section

frozen food section

meat section

soaps, detergents, and household cleaners

canned food section

health and beauty section (shampoo, toothpaste, aspirin, etc.)

bakery section (breads, pastries, cakes)

paper goods and wrappings (kleenex, paper towels, food wraps)

hardware section (pots, pans, dishes, kitchen utensils, mops)

produce section (fresh fruits and vegetables)

dairy section (milk, cheese, eggs, butter, yoghurt, cottage cheese)

January, 1975

important in any person's life. Among the roles were father, mother, wife (girlfriend), husband (boyfriend), the most successful person you have known, the most interesting person you have known, a teacher you like, a teacher you dislike, a pitied person, a threatening person, etc. The names of these people became the elements in Kelly's study. Triandis (1959) in his study of categories of thought about jobs and people in industry, asked subjects to name nine job roles, including the present job, a previous job, the job that S (the subject) would likely be doing if S did not have the present job, a job S would like to have, a job that S considers very useful, etc.

In the present study, eleven food roles were chosen for inclusion. These roles were chosen to represent every phase of the decision process used by consumers to choose foods (see Table 2). The decision model used was developed by Hammett and Van de Mark (1973) in their study of food buying behavior (see Figure 1). Each of the six steps of the decision-making model are represented by one or more food role(s) named in the questionnaire. The specific roles chosen to represent each step were selected on the basis of previous research which has shown that these food roles are relevant to consumers (footnoted in Table 2).

Consideration was given to the fact that the roles specified in the questions were actually dimensions of foods themselves--i.e. "good for you - bad for you," "costs a lot - costs little," "enjoy eating - don't enjoy eating," etc.

Table 2. Food roles used to elicit elements of the universe of foods.

Decision Process	Food Role
STEP 1: Acceptance of responsibility for food selection, preparation and service in the family group	a food that a good homemaker would buy[1]
STEP 2: Sources of food information	a food that you would like to know more about[2]
	a food that you like to talk to your friends about[2]
STEP 3: Event of choice: Product evaluation	a food that you buy even though it costs a lot[3,4]
	a food that you think is not very good for you[2,3]
	a food that you think a person <u>should</u> eat[2,3]

1. Hammett and Van de Mark, 1973
2. Fewster, Postian and Powers, 1973
3. Green, 1975
4. McFadyen, 1972

(continued next page)

Table 2. continued

STEP 4: Event of choice: Mental projection	a food that your family eats only on special occasions[1] * a food that you think is difficult to prepare[1] *
STEP 5: Event of purchase	a food that you would like to buy but don't[3] a food that you buy regularly or routinely[1]
STEP 6: Event of consumption	a food that you really enjoy eating[1] a food that you think is difficult to prepare*

*This role represents both Steps 4 and 6.

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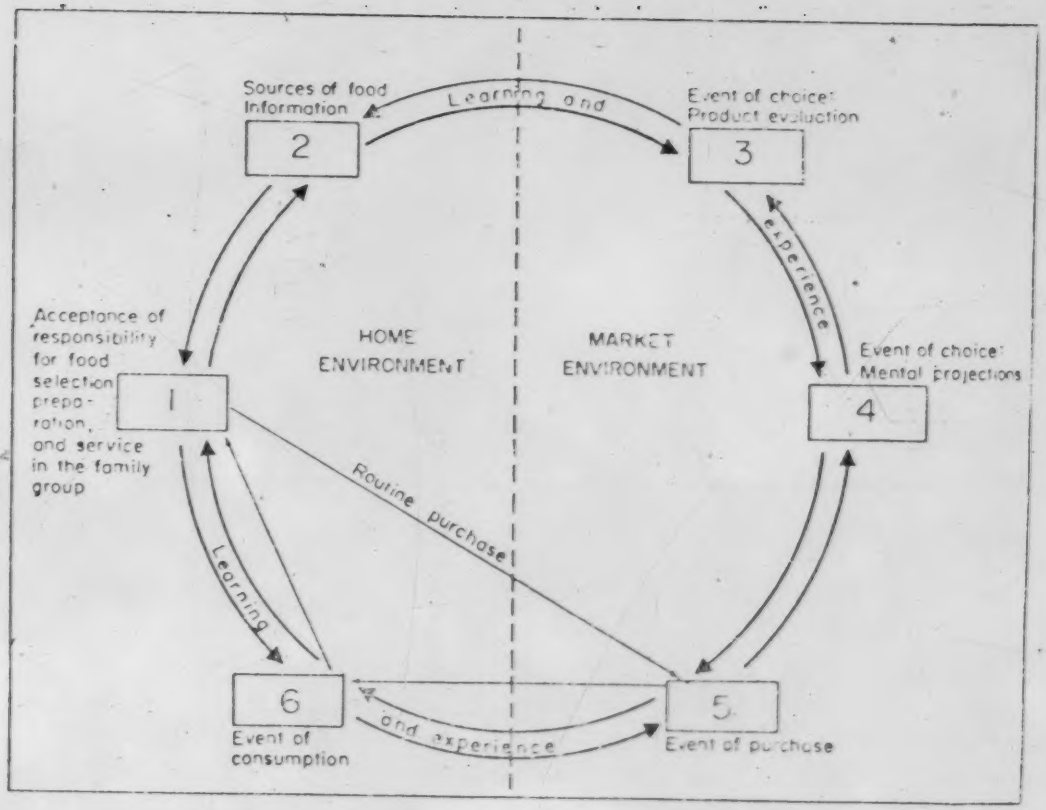

FIGURE 1
Dynamics of choice process used by urban homemakers in food-buying decisions.

Hammett and Van de Mark, 1973

(Fox, 1975). Pretest results were analyzed to determine whether the foods named in these roles would elicit dimensions identical or analagous to those specified in the roles (see Pretest, page 32).

The interviewer recorded the foods named by the respondent on separate cards. Repertory grid technique was applied in the same way as described for food stores and sections of food stores.

C. Section on Demographic Data

The questions on demographics were included only to evaluate the sample distribution (see Sampling, page 33). To obtain the most accurate answers to questions on income, age and education, respondents were given cards with coded responses. Rather than giving an actual answer, respondents gave the code which matched the correct response.

IV. PRETEST

The questionnaire was pretested on a sample of 5 respondents. The dimensions for foods were checked for circularity of response. It was found that many new dimensions were obtained from each respondent, in addition to those inherent in the naming of the food role. Therefore the use of food roles to elicit foods to be used in the repertory grid test did not impede the breadth of response.

The word "supermarkets" in the questions on marketplace was changed to food stores.

In the pretest, respondents gave dimensions referring to the foods in sections of the stores as well as dimensions of the sections themselves. A sentence was added to the interviewers script to caution respondents to think of the sections rather than the foods within the sections.

It was also found in the pretest that some food roles were more efficient than others in eliciting the names of foods. However, all of the pretest respondents found it possible to name a food for all of the roles. Therefore, all the food roles were retained in the final questionnaire.

V. SAMPLING

A. Size of Sample

Frost and Braine (1967), in using repertory grid methodology in market research, stated that "whilst individual respondents each have a more or less unique pattern of constructs, there is a considerable degree of overlap between respondents. So much so, in fact, that by the time 20 to 40 such interviews have been carried out, no new constructs are obtained from any further interviews...." Therefore the initial sample drawn for this study was 20, with additional draws made for specific demographic characteristics not present in the initial sample of 20. After each interview had been completed, the dimensions given by each respondent were recorded. When it appeared that no new dimensions were being obtained, and when all the desired demographic characteristics were present in the sample, interviewing was discontinued. A total sample of 33 was drawn.

B. Development of Sampling Methodology

The purpose of the sampling methodology was to select a widely diversified sample of residents of Edmonton. The original objective was to diversify the sample on those

demographic variables which are known to affect dimensions used to evaluate foods and the food marketplace. This would allow maximum opportunity for all the dimensions used by the Edmonton population to evaluate foods and the food marketplace to be revealed. However, it was found that information regarding the effects of demographic variables is limited.

In order to diversify the sample as much as possible, seven demographic variables were considered in the sampling. These are listed below, with information from previous studies which documents their effect, if any, on attitudes toward food.

1. Income

McFadyen (1972) studied the effect of socioeconomic status on attitudes of consumers toward beef. Income, education, and occupation were used to determine socioeconomic status in her study. No effect was shown.

However, income levels were considered in this study, since income is directly related to buying power, and since price has been shown to be an important factor in consumers' concerns about foods (Green, 1975) and in shopping habits (McFadyen, 1974).

2. Age

Studies have shown that age is an important

factor influencing attitudes toward beef (McFadyen, 1972), and intellectual convictions of "health food" users (Calvert and Calvert, 1975). Therefore age was considered in the sampling for this study.

3. Number and Age of Children, and Marital Status

Stage of the family life cycle has been shown to affect buying patterns (Myers and Reynolds, 1967), and therefore was considered in the sampling for this study. Marital status and ages of the children in the family were used to measure stage of life cycle.

4. Sex

Since traditional roles in the choice, purchase, and preparation of foods are sexist in nature, it is possible that there are differences between sexes in their evaluation of foods. McFadyen (1974) found that the role of males in food shopping is small but significant. Males make up 12.1% of food buyers in Edmonton. The sample in this study sought both males and females.

5. Occupation and Education

These factors are not known to affect the evaluation of foods or the marketplace by consumers, but were included to ensure a broad representation of the Edmonton population.

Although some religions are known to adopt special diets as part of their doctrines, religion was not considered in the sampling. By examining Statistics Canada (1974) census data, it was found that those religions which adopt strong food beliefs--Jews, Middle Eastern religions, Mormons, and Seventh Day Adventists--are in a very small minority in Edmonton. Since the information obtained by this survey is intended for use in consumer programs directed at the general public, and since the variation in religious beliefs about food is not great in the Edmonton population, consideration of religious affiliation was not made in drawing the sample.

Because of the influence of cultural differences on food practices and beliefs, the distribution of the Edmonton population by ethnic origin was examined. Statistics Canada (1974) shows the ethnic origin of the Edmonton population to be 44% British Isles, 12% German, 13% Ukrainian, and 6% French. Seven other classifications make up the remaining 25%.

Ethnic origin as defined by Statistics Canada (1974) is the ethnic or cultural group to which the individual or his ancestor on the paternal side belonged on coming to this continent. The relationship of the individual to the ancestor who entered the country is not specified, ie. grandfather, great-grandfather, etc. Therefore some of those classified as European ethnic origin may be fourth or fifth generation Canadian. Ethnic identity and cultural

variations could be expected to be diluted in those instances. In light of this consideration, it was decided to examine census data on the language most often spoken at home. Ninety percent of Edmontonians reported English as the language most often spoken at home, while 2% reported Ukrainian, and 2% reported German (Statistics Canada, 1974). This suggests a considerable dilution of ethnic identity, which is not reflected in the data on ethnic origin.

Again, since most consumer programs are designed for the general public, the variation in ethnic origin of the Edmonton population was considered insufficient to warrant structuring the sample in terms of ethnicity.

C. Description of Sampling Technique

Of the seven demographic factors considered in the sampling, income shows the greatest variability between census tracts in Edmonton. Therefore, the initial sample of 20 was drawn according to income. The income classifications used were those used by Statistics Canada (1974) in describing the Edmonton population (see Table 3). Each Edmonton census tract was classified according to its average income. A specified number of census tracts were then drawn at random from each income classification, for a total of 10 tracts. The number of census tracts drawn in each case was proportional to the number in the total population who fall into that income group (see Table 3).

Table 3. Number of Census Tracts Drawn from each Income Classification.

Income Classifications	Percentage of ** Edmonton Population	Number of Census Tracts
less than 3000	7.5%	*
3,000 - 4,999	8.8%	*
5,000 - 6,999	11.7%	2
7,000 - 9,999	25.4%	3
10,000 - 14,000	29.4%	3
15,000 - 19,999	10.3%	1
20,000 and over	6.8%	1

*no census tract in Edmonton has an average income in this category.

**Statistics Canada 1974

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The number of tracts drawn in the category $5,000 - 6,999 was proportionately higher than in other categories since no Edmonton census tracts have incomes in the two lowest categories. By increasing the sampling from tracts with an average of $5,000 - 6,999, it was hoped to increase the likelihood of selecting respondents in the lower income categories.

One city block was drawn at random from each census tract. This was achieved by applying a numbered grid to the census tract. The grid contained cells numbered from 01 to 99. Two-digit numbers were read from a table of random numbers. The first number corresponding to a grid cell which covered an eligible block in the census tract was selected. Eligible blocks were those which contained residential dwellings. Agricultural, industrial, or commercial developments and parkland were rejected.

Two persons were interviewed from each block. The interviewer began in the southwest corner of the block and interviewed the first two persons who consented to participate. If an apartment building occurred in the block, the interviewer began at the dwelling in the southwest corner of the building.

This initial sample of 10 census tracts yielded 20 respondents. At the completion of this initial sampling, the demographic characteristics of the 20 respondents were examined, and deficiencies were noted in the following categoies: age 31-35, age 56-65, age over 65, and income

$10,000-14,999. A second sample was drawn to obtain respondents with the characteristics shown to be deficient by the demographic analysis. Two census tracts were drawn at random from those with the highest proportion of persons age 56 and over, and one census tract was drawn to meet the other deficiencies. When this additional sample failed to yield enough respondents age 56 and over, two further respondents were solicited from the Strathcona Place Society, a service, recreation and drop-in centre for Senior Citizens.

VI. INTERVIEWING

The interviews were conducted by one trained interviewer in the respondents' homes. Morning, afternoon, and evening interviews were conducted, each about 40 minutes in duration. The entire survey was completed by the interviewer, who recorded responses given verbally by respondents. Results from each survey were recorded on the same day that the interview was conducted.

VII. ANALYSIS OF RESULTS

In the analysis, no differentiation was made on the basis of the frequency with which each dimension was volunteered by respondents, nor was there any analysis for differences between demographic groups--such as age or income categories. The purpose of the study was not to evaluate the dimensions used by consumers to appraise foods and the marketplace in terms of the relative importance of the dimensions, or their prevalence of use. This must be done in a subsequent quantitative study with a larger sample. The technique used in this study was used to generate a comprehensive list of the dimensions used by consumers, which could be evaluated in a further study. The list must therefore be an accurate representation of the dimensions, expressed in terms which are familiar to and used by consumers, and with no repetitions.

All dimensions given by respondents were recorded on a master list. Dimensions which were strictly denotative in nature were eliminated. For example, a dimension of food which was eliminated was "liquid - solid." Many denotative or descriptive (as opposed to connotative or evaluative) dimensions remained on the list such as "good source of protein - not a good source," since it was felt that such dimensions may be of importance to consumers in evaluating foods. The subsequent quantitative study of the dimensions

will eliminate those which, in fact, are not important.

The list of dimensions was presented to an expert panel for the purposes of identifying repetitious dimensions--those which were simply different expressions of a single idea; and choosing the "best expression" among repetitious dimensions. The "best expression" was chosen for its ability to express the dimension in a way that would be easy to understand and meaningful to the majority of consumers.

Panel members were chosen for their experience in communicating with consumers and their familiarity with consumer research techniques. A panel of six was selected. The questionnaire schedule was administered to each panelist for familiarization with the research instrument. Instructions were given verbally to each panelist individually and a written summary of instructions was given with the list of dimensions (see Appendix C). Each panelist then completed the task without conferring with other panelists or the researcher.

The panel results were consolidated into a final list by the researcher. In cases where panelists disagreed on the choice of a best expression, the majority opinion was retained.

Chapter IV. DEMOGRAPHIC DISTRIBUTION OF SAMPLE

The distribution of the sample over each demographic variable is shown in Tables 4 to 10. Wherever possible, the distribution of the Edmonton population is also given. This data is derived from Canadian census data (Statistics Canada, 1973; Statistics Canada, 1974). In a qualitative study, this information cannot be used to make a statistical evaluation of the sample distribution. Rather, it is used as a guide to determine whether the objective of drawing a diversified sample was achieved. Data for the Edmonton population are not given for education or occupation, since the categories used by Statistics Canada to describe these parameters cannot be condensed into the format used in this study.

The sample was adequately diversified on all variables. From Table 6 it may be noted that females outnumber the males by 28 to 5. The interviewer reported that most males who came to the door called their wives when told that the interview was about foods and food shopping. This is to be expected since females assume the main responsibility for food management in the home, and male shoppers represent a small proportion (12.1%) of food buyers in Edmonton (McFadyen, 1974).

One category of education, apprenticeship, showed a low

Table 4. Distribution of respondents by occupation.

housewife	11
housewife working part time	3
retired	4
student	3
professional-managerial	6
skilled or semi-skilled	2
clerical/secretarial	3
unknown	1

Table 5. Distribution of respondents and spouses or parents by education.

	Number of Respondents	Number of Spouses Or Parents
less than high school	6	2
high school	10	5
vocational/technical	6	6
apprenticeship	1	2
some university	2	2
university degree or diploma	7	5
unknown	1	

Table 6. Distribution of respondents and spouses by age.

Age Group	Number of Respondents	Number of Spouses	Edmonton** Population
under 25	8	1	20.1%*
25 - 30	6	1	14.6%
31 - 35	2	3	
36 - 40	2	4	12.1%
41 - 45	5	1	
46 - 55	6	7	9.9%
56 - 65	1	1	6.7%
over 65	3	1	2.2%

*This figure is derived by combining Statistics Canada data from age categories 15 - 19 years and 20 - 24 years.

**Statistics Canada 1973

January, 1975

Table 7. Distribution of respondents by sex.

	Sample Population	Edmonton Population*
females	28	49.9%
males	5	50.1%

Table 8. Distribution of respondents by marital status.

	Number of Respondents	Edmonton Population*
single	10	
separated	2	27.8%
divorced	0	
married	19	66.9%
widowed	2	5.4%

*Statistics Canada, 1973

January, 1975

Table 9. Distribution of respondents by number and ages of children.

1. Total Children in Family	Number of Respondents	Edmonton** Population
none	14	29.6%
1	4	21.6%
2	5	22.6%
3	4	21.4%
4	5	
9	1	4.9%*

2. Distribution of Children (across all families) by Age

Age	Number of Children	Edmonton** Population
under 6	8	27.3%
6 - 14	19	46.6%
15 - 18	5	16.9%
19 - 24	15	9.2%
over 24	8	not classified by Statistics Canada

*This figure is taken from Statistics Canada data for the category 5 children and over.

**Statistics Canada, 1973

January, 1975

Table 10. Distribution of respondents by income.

Note: Respondents living in families reported total family income. Respondents living alone or not with their families reported single incomes.

	Number of Respondents Family	Single	*Edmonton Population
less than $3000	0	0	7.5%
$3000 - 4999	1	2	8.8%
$5000 - 6999	3	0	11.7%
$7000 - 9999	4	1	25.4%
$10000 - 14999	5	0	29.4%
$15000 - 19999	5	1	10.3%
$20000 and over	10	0	6.8%
no answer		1	

*Family Income, Statistics Canada, 1974

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frequency (see Table 5). However, it was felt that many respondents would report apprenticeship as vocational/technical training. When these two categories are combined, the sample is balanced for all education categories.

Chapter V. QUESTIONNAIRE RESULTS

The average number of dimensions given per respondent (see Tables 11 and 12) is comparable to the average reported by Frost and Braine (1967). They stated that respondents normally provide between 10 and 30 dimensions, and the average is 18 dimensions per interview. The section dealing with foods yielded a higher number of dimensions per respondent than either food stores or sections of food stores.

The average number of triads drawn was lower for food stores than for foods or sections of food stores. This occurred due to the small number of elements (average 4, range 1-7) in this category compared to sections of food stores (12) or foods (11). The total number of triads drawn, summed over all three parts of the questionnaire, averaged 13 per respondent. This is within the range recommended by Bannister and Mair (1968), 10 to 25, as commonly acceptable for a wide variety of respondents.

The list of dimensions obtained from the survey results included 121 dimensions of food, 91 dimensions of food stores, and 70 dimensions of sections of food stores. This list was reduced by the expert panel to 41 dimensions of food, 32 dimensions of food stores, and 16 dimensions of sections of food stores. In addition, 2 dimensions of

Table 11. Number of dimensions given per respondent for each section of the questionnaire.

	Average	Range	Median
Food Stores	5	1 - 12	5
Sections of Food Stores	4	1 - 14	4
Foods	8	2 - 18	8
Total	17	4 - 41	17

Table 12. Number of triads drawn per respondent for each section of the questionnaire.

	Average	Range	Median
Food Stores	2	1 - 4	2
Sections of Food Stores	5	2 - 11	4
Foods	6	2 - 12	6
Total	12	5 - 24	12

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foods, and 2 dimensions of sections of food stores were retained in the reduced list due to the researcher's opinion that these were unique dimensions not represented in the panel's final list, and warranted further study. The complete list of 92 dimensions is presented in Appendix B. Those which were retained by the researcher (as opposed to being chosen by panelists) are noted by an asterisk in Appendix B and in the following Discussion (Chapter VI).

Readers who wish to obtain the raw list of dimensions as it appeared from the survey results, prior to the panel analysis, may do so by writing to the author at the Faculty of Home Economics, University of Alberta, Edmonton, Alberta.

Chapter VI. RESULTS AND DISCUSSION

The intention of this research was to describe the dimensions of foods and the food marketplace which interact to influence consumer's food choices. These dimensions were elicited in the form of bipolar constructs that are amenable to subsequent quantitative study by a scaling technique, such as the semantic differential. This subsequent stage of research would evaluate the prevalence of use of each dimension, the relative importance of the dimensions, and their patterns of interaction in directing consumer choices.

It is usually tempting to make certain intuitive observations in qualitative analyses. For example, in this study, the researcher might wish to predict that consumers correlate the safety of foods with the "processing" dimension, the "food value" dimension, the "fattening" dimension, and the overall acceptability of foods. However, as Heise (1970) pointed out, intuition is an unreliable guide in making this type of analysis. It is necessary to execute quantitative study and use objective methods of analysis in order to make accurate interpretations. Multivariate analysis can reveal associations of which consumers are not aware and researchers are unlikely to predict. For example, McFadyen *et al.* (1973), in a study of consumer attitudes toward beef, found that price was not

related to acceptability of meats. Rather, the most important factors influencing the acceptability of meats were nutrition, tenderness, suitability for serving to special guests, fattiness, waste, and packaging.

The results of the present study are in the form of a list of dimensions (Appendix B). The list includes those which are essential to the decision process of the majority of consumers, and those which are used by only a few. No information is provided to describe the ways in which the dimensions interact in consumers' thought processes to influence food choices. Nor does the size of the sample allow quantified analysis of the data. Therefore no interpretive analysis is warranted at this time.

Throughout the research, there has been a deliberate attempt to avoid imposing the researcher's conceptual framework on the methods or results. The reader must now be cautioned to the fact that there is some diversion from that practice in the following discussion. The findings are presented in the context of other trends and phenomena in the consumer marketplace, pointing out possible associations which could be studied further. This discussion is speculative in nature, and is derived from the opinions and observations of the author, although it is documented wherever possible. It is intended that the discussion will provide the reader with examples of ways that the dimensions could function in consumers' evaluations of foods and the food marketplace, although their actual functions can only

be determined by further, quantitative research.

The dimensions are discussed under the sub-titles of each category: A. Foods, B. Food Stores and Sections of Food Stores. Each is simply discussed in turn and there is no deliberate attempt to make one appear more important than another. Not all of the dimensions which are listed in Appendix B are discussed.

A. Section on Foods

The dimensions of foods included several which related to nutrition (see Appendix B). Three of these express the view that certain foods are required for essential nutrients in the diet, while others are not, and may be eaten for other reasons than nutrition. While the prevalence of this view has been widely recognized by consumer-oriented programs, including advertising, the impact of nutritional needs on consumer food choices is not known. The identification of many other dimensions of foods in this study illustrates the complexity of factors which may influence food choices. Further study is required to determine the relative importance of nutrition compared to other factors, and the image profiles of nutritious and non-nutritious foods. Other dimensions identified by this study may contribute to the image profile to influence the

acceptability of nutritious foods, for example, "fattening - not fattening," "easy to prepare - hard to prepare," "expensive - inexpensive," "popular in my family - unpopular in my family," and others.

Four specific nutrients were also given as dimensions used to differentiate foods: protein, carbohydrate, vitamins, and minerals. Sugar content* was also given and may be viewed by consumers as a separate dimension from carbohydrate content in foods, although sugar is a carbohydrate. This possible distinction between sugar and carbohydrate by consumers could be examined by semantic differential study.

Fat (except in the dimension "fattening - not fattening") and fibre are absent, although both are viewed as nutrients by members of the scientific community--fat for several decades, and fibre more recently. It is also noteworthy that cholesterol was not mentioned, although the Nutritionist with the Edmonton Local Board of Health (1975) receives many inquiries about this nutrient.

The dimensions "safe to eat - unsafe to eat," "highly processed - processed to a lesser degree," and "artificial - natural" are probably manifestations of recent concerns in the press and media over the quality of the food supply. It is interesting that no dimension was given regarding food additives in spite of numerous publications which warn consumers of their use (Davis, 1970; Hunter, 1971; Turner, 1970) and press reports of threats to health.

The dimension "fattening - not fattening" attests to the prevalence of overweight among Canadians. Other prevalent health hazards believed by scientists to be related to food intake were not mentioned, such as heart disease, and diabetes.

Five dimensions were related to food preparation. These dealt with the need for preparation of some foods before eating versus ready-prepared foods, the ease of preparation, versatility in preparation, and enjoyment. Food preparation practices have changed markedly in North America in recent decades, as eating patterns changed (Call, 1972; Parrish, 1971; Pyke, 1974). Less time is dedicated to food preparation (Parrish, 1971) and the traditional pattern of three meals a day has given way to several small meals (Lachance, 1973). Convenience foods have proliferated simultaneously with these changes and food marketers have repeatedly credited this to the desire of consumers for shorter preparation times (Call, 1972). On the other hand, some critics of the industry have blamed advertising programs for foisting unwanted products on consumers rather than responding to real needs (Packard, 1957). Food preparation appears prominently as a factor in this study, with four preparation-related dimensions given by consumers. Further study can determine whether, in fact, consumers actually desire foods with little or no preparation required.

Foods were clearly seen as functioning within specific

meal roles. Dimensions were given which differentiated foods on the basis of whether they could be used as a complete meal or only a part of a meal; as a main meal or a snack; as a special occasion food or a basic, everyday food; and as a food eaten at home or while dining out. This relegation of foods to specific roles could have a powerful influence on consumption patterns, and on the overall images of certain foods. Knowledge of the accepted meal roles of their products would enable marketers to focus promotion programs on reinforcement of these accepted roles or on increasing the acceptability of less common roles. Nutrition educators, who hold as their goal the change of consumption patterns to improve nutritional status, must be aware of acceptable meal roles of certain foods in order to promote the use of foods in a way that is acceptable to consumers. For example, it is questionable whether consumers view foods such as pizza, or hamburgers on a bun as "complete" or "main" meals, even though these products may contain foods from all four main food groups: milk product, fruit and vegetable, meat, and cereal.

The ratings of foods on the dimensions "complete meal - part of a meal" and "eat because necessary in the diet - eat for enjoyment or variation" may be measures of the perceived role of some foods in maintaining life or vitality. Expectations of government intervention in the marketing and pricing of certain food commodities may be related to consumers perceptions of the vitality or

life-giving qualities of the food. The actions of government in regulating import of beef, in subsidizing products such as bread, and regulating prices of products such as milk are probably interpreted by consumers relative to the conceptual framework which determines the image of these products. One could speculate that the two dimensions of food noted above play a major role in evaluating governmental intervention in certain food markets.

The rise in consumption of foods away from home is reflected in the dimension "generally eat at home - eat out." Far-reaching influences of the consumption of foods away from home are predicted for the future. At this time in the United States, 30% of the food dollar is spent on meals consumed away from home (Sherck, 1971). Enormous increases are predicted (Lachance, 1973; Parrish, 1971; Sherck, 1971). Consumption patterns are probably similar in Canada. Since this could have a marked influence on food processing, the food service industry, consumers and family life, the attitudes of consumers to foods away from home should be studied.

The cost of foods is evaluated by two dimensions, one which considers overall cost and one which considers cost relative to "food value." It is probable that "food value" refers to nutritive value, as opposed to prestige value, sensory-aesthetic value or others. A separate dimension "high in food value - low in food value" could be used in further study to correlate the expression "food value" to

nutrition or other dimensions. This correlation will define the aspect of food value that is related to cost in the dimension "get more food value for the money - get less food value for the money."

Further study by scaling techniques can also reveal the dimension profile of an expensive food and an inexpensive food. The relationship of expense with other dimensions such as nutrition, degree of preparation required, meal role, suitability for serving to guests or eating away from home, ease of purchase, and general acceptability of foods will explain the conceptual framework used by consumers to evaluate cost.

Six dimensions appear to express the overall acceptability of foods: "like - don't like," "most people like this food - only some people like this food," "eat seldom - eat often," "have tasted - have never tasted," "buy often - never buy," and "popular in my family - unpopular in my family." When multivariate analysis is applied to semantic differential studies of attitude, it has been shown that "a pervasive evaluative factor in human judgment regularly appears first and accounts for approximately half to three-quarters of the extractable variance" (Osgood, Suci, and Tannenbaum, 1957). This evaluative factor is often measured by such scales as good - bad, valuable - worthless, positive - negative, and indicates a favorable or unfavorable disposition toward something. McFadyen et al. (1973) used the expression "would likely buy - wouldn't

likely buy" as an overall measure of acceptability in her study of attitudes toward beef. It is likely that multivariate analysis would show one or more of the above six dimensions with a high loading on the evaluative factor.

Aspects of food storage are expressed in the dimensions "stores well - does not store well" and "can be frozen and kept on hand - can't be frozen." Storage, especially frozen storage of foods, is an aspect of food management about which many consumers appear to need information (Stiles, 1975). It is not known whether consumers consider storage to be important in choosing foods or whether their knowledge of storage is sufficient to ensure that the quality of foods is adequately maintained in home storage. Consumers may blame poor quality, especially lack of freshness, on the merchandiser when, in fact, poor home storage is at fault. This will require further study before the need for storage information can be assessed.

The dimension "everyday family meal - good for entertaining guests" may reflect the prestige value of foods. McPadyen (1972) found that, in relation to meats, nutritive value and suitability for serving to guests contributed to a prestigious image.

The dimension "easy to buy - requires much time and effort to buy" differentiates food on the degree of difficulty in purchase. This dimension may distinguish some foods as creating more stress than others in purchase decisions. These foods may be the major contributors to

consumer dissatisfactions. This would suggest that consumer assistance programs, especially through government agencies, would be most effective if centred on stress-producing foods.

There is a noteworthy absence of explicit expressions of such dimensions as sexual appeal, prestige or social value, power, religion, and happiness/sadness which have been said to influence food choices (Dichter, 1964) and are frequently used in advertising campaigns. These are factors of emotion and status, precisely those which the methodology used in the study was designed to reveal.

It may be that these factors underlie some of those actually verbalized in the study. Multivariate analysis of semantic differential data can be used to reveal these underlying meanings. Osgood, Suci, and Tannenbaum (1957) and Heise (1970) show that the technique can reveal three factors of variation which are common to a wide variety of subjects, concepts, and scales (dimensions in this study). Each of these factors has been shown to be associated consistently with certain bipolar scales (dimensions in this study) and is characterized by the nature of these scales.

The first factor (the one having the highest loadings shown by factor analysis) is an evaluative factor associated with dimensions such as good - bad, valuable - worthless, rich - poor, and happy - sad. Examples of food dimensions from this study which would possibly associate with the evaluative factor are like - dislike, popular - unpopular,

and most people like this food - only some people like this food. The evaluative factor for foods could also be considered to include the dimensions of prestige (valuable - worthless, rich - poor) and happiness, on the basis of the work by Osgood, Suci, and Tannenbaum (1957) and Heise (1970). The second factor (the one with the second highest loadings) is potency, which includes the factors of power. The third factor, activity, is one which includes dimensions such as active - passive, fast - slow, and hot - cold.

By use of multivariate analysis of semantic differential data, then, the dimensions of emotion and status which appear to be missing from this study could be associated with the dimensions which load highly on the factors of evaluation, potency, and activity. Alternatively, this study could be supplemented by a small number of depth interviews conducted in an environment which allows free probing of responses by the experimenter. Sampson (1967) noted that this type of interview elicits spontaneous, self-revealing and personal rather than superficial responses. He stated that "the depth interview can reveal important aspects of psycho-social situations which are otherwise not readily available and yet may be crucial for understanding observed behavior and reported opinions and attitudes."

Compared to other studies which delineated factors used by consumers to evaluate foods, the present study elicited several new dimensions in addition to those found by other

studies, and did not yield some which were given in other studies. A study of the connotative meanings of foods by Fewster, Bostian and Powers (1973) was described in the literature review. They selected 22 bipolar scales to measure the connotative meanings of foods. The scales were initially derived from a literature search and were shown by multivariate analysis to differentiate between the connotative meanings of different foods, and between the connotative meanings of foods to different income groups. Twelve of these scales represent dimensions which were not given by respondents in the present study (see Table 13). This is probably due to the derivation of the scales by a literature search rather than by consumer studies. These twelve scales may be expressions of dimensions of foods which are deemed relevant by researchers and other writers in the literature but not by consumers. Or they may represent dimensions which are relevant to consumers but not expressed in consumer language. Many of the dimensions elicited by the present study are not included in the scales of Fewster, Bostian and Powers (1973).

Green (1975) reported nine food "concerns," volunteered by consumers, four of which were not given in the present study (see Table 14). One of these four, packaging (of meats), was used in the present study as a dimension used to differentiate between meat markets and supermarkets, and was a denotative rather than evaluative dimension. Green focused on "concerns" about foods, while the present study

Table 13. Semantic differential scales from Pewster, Bostian and Powers (1973) which did not appear in the present study as dimensions used by consumers to evaluate foods.

easy - difficult

superior - inferior

light - heavy

I often think about this food - I rarely think about this food

I would like to know more about this food - I would not like to know more about this food

appetizing - unappetizing

does not cause allergy - causes allergy

important - unimportant

I like to read or hear about this food - I do not like to read or hear about this food

satisfying - unsatisfying

I frequently talk about this food - I rarely talk about this food

high energy - low energy

January, 1975

Table 14. Concerns about foods and food shopping determined by Green (1975).

prices

quality

nutrition

safety

processing

additives*

advertising*

labelling*

packaging*

*These concerns did not appear in the present study as dimensions used by consumers to evaluate foods.

January, 1975

gave no particular focus to the dimensions elicited. It would be expected that the findings of the present study are more general in nature and would only surface those concerns which are more prevalent in the population, or more important. It is not surprising, then, that Green's results detail "concerns" which are not given here.

B. Section on Marketplace

1. Dimensions Used by Consumers to Evaluate Food Stores

Eight dimensions were given for quality of merchandise in food stores. Two refer to the aggregate of food products, and express the dimensions of freshness, and commercial versus home-made quality. Two refer to the quality and the freshness of fresh fruits and vegetables, three refer to the quality of meats, and one refers to the quality of bakery products. This distinction given to the quality of fresh fruits and vegetables, meats, and bakery products may indicate a judgment of the overall quality of merchandise in a store by the quality of these three food products.

One dimension of sections of food stores (always go back to the store because this section is excellent - this

section doesn't influence my choice of stores*) indicates that some sections of the store are more important than others in influencing consumers' choices of food stores. Another dimension of sections of stores which may relate to this consideration is "always good quality - quality varies from week to week." The three products whose quality was used to differentiate between stores--fresh fruits and vegetables, meats, and bakery--are products with more variable quality than others such as canned goods, cereals etc. This variability may account for the importance of these products in judging the overall quality of merchandise, if this importance is borne out by quantitative study.

Two dimensions are measures of the product mix of the store or the shopping area or centre: "sells only food - sells other items as well as food," and "convenient, located with other shopping facilities - grocery shopping only." The association of convenience with location adjacent to other shopping facilities suggests a positive response to current trends toward the shopping centre concept. The dimension of the product mix within a store is a measure of the acceptance of the department store concept. While the number of food outlets which are part of a department store in Edmonton is small, food stores here are part of a trend toward greater product mix that is evident all over North America. Health and beauty aids and hardware are the two main non-food items introduced in food stores over the past

decade.

Six dimensions relate to the diversity of merchandise within each product line. Three relate to selection or variety--of meat cuts, of the aggregate of merchandise, and of specialty or imported foods. Two are related to the assortment of brands. One measures the presence or absence of an in-store bakery.

Three dimensions relate to the accessibility of the store, as determined by distance from the home, parking space, and hours of operation. Three others relate to the role of the store in meeting shopping needs: for regular shopping, for special occasion shopping, for bargain shopping, or for convenience shopping. The importance of accessibility of the store could be predicted to interrelate with the role of the store. This interrelationship could be examined by quantitive study.

Price was mentioned frequently by respondents. This could be expected since Green (1975) showed price to be an important factor in consumers' concerns about foods, and McFadyen (1974) stated that price was an important deciding factor in store choice. Two price dimensions were given in the present study to differentiate between stores. One is a general judgment of price levels as being "high" or "reasonable." One is a judgment of meat prices.

Service was considered in two dimensions: "personal service - impersonal service" and "takes longer to get waited on - takes less time to get waited on." The former

refers to the manner in which service is provided. The latter refers to the efficiency of the service, and was related to checkout service by respondents. The modern supermarket is a self-serve operation where customers choose foods and make purchases with little assistance from staff. In large supermarkets, the shopping experience is largely impersonal in the sense that there is little interpersonal interaction. Service by staff is concentrated mainly at the checkout, although some stores have staffed delicatessen and bakery counters. It is not clear whether the dimension "personal service - impersonal service" is a judgment of checkout service only or the overall service by the store. It is also unclear whether the words personal and impersonal refer to the presence of staff to serve customers or the atmosphere of the store. This must be determined by further study.

Atmosphere was considered in the dimensions "nice atmosphere for shopping - not a nice atmosphere for shopping" and "the customer is pressured to buy - the customer is not pressured to buy." The appearance of the store was also considered, first in a dimension which measured like or dislike of the appearance, and second, in a dimension which measured the individuality or uniqueness of the appearance.

One dimension was given relating to the nature of the ownership of the store: "private ownership - corporate ownership." There have been expressions of disapproval from

consumer advocates of corporate or conglomerate ownership of food retail stores (Cross, 1970). However, no positive or negative association is made with the ownership dimension in this study. This association could be discovered by further study.

In review, the total list of dimenions used by consumers to evaluate food stores includes some factors related to the merchandise (quality, price, and selection) and some factors related to the shopping facility (accessibility, service, atmosphere, appearance and ownership). Retailers have diligently studied the interaction of these factors which influence the customer's choice of stores. However, there is no published information about the importance of each factor in consumers' choices. The next stage of study proposed for this research would evaluate these factors in order that the nature of consumer choices of food stores can be more clearly understood.

2. Dimensions Used by Consumers to Evaluate Sections of Food Stores

The dimensions given in this part of the study were closely related to those given for food stores. The presence of staff to serve customers in some sections but not in others, the greater selection of merchandise offered

in some sections, and the levels and variations of prices are dimensions which were also used to differentiate between food stores. However, several new dimensions emerged which may operate in cognitive processes and evaluations of the marketplace.

Three relate to display of goods--attractiveness, roominess, and organization. Attractiveness of display was also viewed in light of its ability to "tempt" the shopper to buy.*

The role of the section was noted in the dimension "shop regularly - shop occasionally." Sections were also differentiated on the basis of whether they contained "natural, health" foods, whether they smelled good or bad, and whether they are interesting, or dull and boring.

Three dimensions were concerned mainly with non-food sections, such as soaps, detergents and cleansers; health and beauty aids; and hardware. These products are available from other retail outlets. The dimension "expect to find in a food store - don't expect to find in a food store" measures the acceptability of these products in food stores. (This dimension was given in a slightly different form to differentiate between food stores in their product mix. See page 69.) The dimensions "don't buy in a food store - do buy in a food store" and "prices high in supermarket compared to other stores - prices reasonable in supermarket" are also measures of the acceptability of the food store as a market for non-food items.

One dimension relates to the produce section: "must package and weigh food yourself - don't have to." This may be purely descriptive and play no evaluative role. That is, it may be neither a positive nor a negative factor in consumers' evaluations of the produce department. However, consumers' attitudes toward bulk sales is not presently known. Therefore this dimension was retained to be evaluated in further study.

The dimension "daily changeover of fresh foods - no daily changeover" is one which probably relates to those foods which have the most variable quality--fruits and vegetables, meats, bakery, and dairy (see page 68). The possible importance of some sections of the store, where product quality is most variable, is indicated by the dimension "always go back to the store because this section is excellent - this section doesn't influence my choice of stores*." This interrelationship was discussed earlier (see page 68). Another dimension of sections of food stores which measures variability of product quality is "daily changeover of fresh foods - no daily changeover."

The dimension "can buy small portions for one person - can only buy family-sized portions" is one which is relevant to persons living alone. In Edmonton, 15% of households are persons living alone (Statistics Canada, 1973). These are concentrated near the downtown area of the city. This would indicate that a significant number of shoppers in downtown food stores are choosing portions for one person only, and

the dimension of small portions may be important in downtown store choice.

Chapter VI. CONCLUSIONS

In their evaluations of foods and the food marketplace, consumers consider mainly those aspects of foods and stores which have an immediate effect on the acts of shopping and consumption. The food quality, selection, convenience, atmosphere and appearance, prices, display, and service are among the dimensions used to evaluate stores.

Little consideration was given to broader social or economic issues which govern the consumer's role and power to influence the marketplace. No mention of profit margins, advertising policy, merchandising techniques, product differentiation, or consumer information programs such as code-dating, unit pricing, or nutrient labelling was made. Competitive trade practices between food retailers were not considered, except indirectly in the differentiation between stores on the basis of their private or corporate ownership.

A similar pattern was shown in the dimensions of foods expressed by consumers: nutrition, food preparation, food safety, meal roles, cost, food storage, suitability for guests, and ease of purchase. These are all aspects of foods which are immediately relevant to the acts of purchasing, preparing and consuming foods. Issues such as advertising, packaging, labelling, and government regulation of quality, safety, grading, and pricing were not raised.

This would imply that governmental actions, education programs, and marketing strategies are most effective in influencing consumer behavior and attitudes when a direct and immediate association is made with the acts of purchasing and consuming foods. Long range programs to improve the efficiency of the marketplace or the consumer's economic role will not be perceived favorably unless immediate benefits can be perceived.

The objective of this study was to explore the conceptual framework used by consumers to evaluate foods and the food marketplace. The study was designed to outline the dimensions of foods and the food marketplace which interact to influence food choices by consumers. In the development of the research design, there was a deliberate endeavour to minimize researcher bias and ensure that the results would accurately represent the dimensions used by consumers. The research therefore generated a comprehensive list of consumer-defined dimensions which can be used reliably for quantitative study of consumers' conceptual processes. However, a supplementary study is required to determine whether there are emotional and psychological dimensions of foods and the marketplace which were not revealed by this research.

Chapter VIII. LIMITATIONS OF THE STUDY

This research is qualitative in nature and must be viewed as an exploratory study. Because of the projective nature of the technique, the validity of responses is high. However, the expense and objectives of repertory grid surveying limits the size of the sample, and no generalizations can be made to the larger population. Further study using quantitative and objective research techniques are required to evaluate the prevalence of use of the dimensions discovered in this study, the relative importance of each dimension, and the interactions between dimensions governing consumer choices.

The study should be supplemented by some technique which will reveal the deeper emotional and status factors which influence food choices. Alternative forms of study for this purpose are presented in the Discussion.

This study was designed to reveal dimensions used by consumers to evaluate foods as a general category. Some dimensions specific to certain foods may be omitted. To cite an example, perhaps all the dimensions specific to cheeses may not be revealed by this study, since there may be unique dimensions used to differentiate cheeses but not other foods.

Chapter IX. IMPLICATIONS FOR FURTHER RESEARCH

Many references have been made in this report to the need for further research. The present study has outlined dimensions which operate in the conceptual framework used by consumers to evaluate foods and the food marketplace. The next stage of study could further delineate conceptual processes by measuring the relative importance of the dimensions and describing their patterns of interaction. Differences between various segments of the population--young and old, high and low income, urban and rural, higher education and lower education--in their evaluations of food could also be determined. To food marketers, this is known as market segmentation. Other groups who are interested in consumer programs, such as educators, can benefit equally from segmentation, since they, too, must be aware of the special needs of the groups they serve.

In Alberta, this information could be of value to many groups. Since food production is a major industry in this province, we are concerned with both marketing and consumption of food. Food marketing programs and consumer programs are evident in both government programming and in the promotional programs of private industry.

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APPENDIX A

QUESTIONNAIRE SCHEDULE

I. QUESTIONS ON MARKET PLACE

1. Name all the stores where you buy food, starting with the one where you shop the most and ending with those you use only occasionally.

Interviewer records stores on cards in sequence. Check that R includes all supermarkets, corner or convenience stores, health foods stores, bakeries, meat markets, delicatessens, farmers' markets. Place cards face down and mix thoroughly. Ask R to draw three cards.

Please consider these three stores and tell me some important way in which two of them are alike and different from the other one.

Interviewer: Compare speciality stores to appropriate section of supermarket eg. Bakery Store to Bakery section of Safeway. Ask R to think of other ways to differentiate the stores until he cannot give further responses. Again place cards face down, mix thoroughly, ask R to draw three and repeat process. When R can give no dimensions for a triad, request a new draw. If no dimensions are given for this draw, or if 15 minutes have passed, proceed to next section.

2. Place cards which are coded red face down and mix thoroughly. Ask R to draw three.

This part is similar to the last part, except that you will compare sections of a food store, rather then different stores. Think of the store where you do most of your shopping.

Consider these three sections and tell me some important way in which two of them are alike and different from the other one. Be sure to think about the <u>section</u> of the food store, not the <u>foods</u> that are in it.

II. QUESTIONS ON FOOD

In this next section I'm going to ask you to name different foods. Answer with the first food that comes to your mind, and answer as quickly as possible. There are no right or wrong answers, just give me the name of a food that you think fits the question.

Record each response on numbered cards. If R answers with the same food twice, ask for a different food, but record the repeated food in square brackets on the space below.
Eg. A food that you really enjoy eating (meat).

1. Name a food that you think a good homemaker would buy for a family.....
2. A food that you really enjoy eating.....
3. A food that you think a person should eat.....
4. A food that you buy even though it costs a lot.....
5. A food that you buy regularly, or routinely.....
6. A food that you would like to know more about.....
7. A food that you would like to buy but don't.....
8. A food that you think is difficult to prepare.....
9. A food that you (your family) only eat(s) on special occasions.....
10. A food that you think is not very good for you.....
    Do you buy this food?
    Yes.....
    No.....
11. A food that you like to talk to your friends about.....

Place cards face down and mix thoroughly. Ask R to draw three cards.

Now we are going to look at these foods differently. Please consider these three foods and tell me any important way that two of them are alike and different from the other one.

III. QUESTIONS ON SELF

In this last part of the survey, there are just a few short questions.

1. The first is: Is there anyone in your family that has a special diet?

   Yes. Specify.....

   No

2. Do you do most of the food buying for the family?

   Yes.....

   No..... Do you ever go along on shopping trips? How often?

3. Do you cook all of the food for the family?

4. How many children do you have? What are their ages?

   None.....

   Under 6....

   6 - 14....

   15 - 18....

   19 - 24....

   over 24....

5. What is your age on your last birthday? Just give the letter for the age group that matches.

   A. under 25 E. 41 - 45

   B. 25 - 30 F. 46 - 55

   C. 31 - 35 G. 56 - 65

   D. 36 - 40 H. over 65

6. Your husband/wife's age?

A E

B F

C G

D

7. What is your occupation?.....

Your husband/wife's occupation.....

8. What level of education did you and your husband/Wife last complete? Just give the letter that fits for each of you.

Wife	Husband	
A	A.	less than high school
B	B.	high school
C	C.	vocational/technical
D	D.	apprenticeship
E	E.	some university
F	F.	university degree or diploma

9. What was your total family income reported on your income tax return last year? Just give the letter for the range that fits.

A. less than $3000	E. 10,000 - 14,999
B. 3000 - 4999	F. $15,000 - 19,999
C. $5000 - 6999	G. $20,000 and over
D. $7000 - 9999	

10. Sex.....

11. Marital Status

Married.....

Single.....

Separated.....

Divorced.....

Do you live alone? Yes... No...

THAT COMPLETES THE INTERVIEW. IS THERE ANYTHING YOU WOULD LIKE TO ADD?

Time Ended.....

COMMENTS BY INTERVIEWER:

Co-operativeness of respondent
low....
average....
high....

Involvement of respondent
low....
average....
high....

What extent of probing was necessary?
low....
average....
high....

Any other person(s) who may have affected responses?

Comment on R's reactions and responses to the different sections of the questionnaire.

Identify R's major interests or concerns about food.

INSTRUCTIONS TO INTERVIEWER:

After leaving R's home, record the names of the food stores volunteered by R, in the sequence of frequency of shopping. This information can be taken from the numbered cards.

1. .....
2. .....
3. .....
4. .....
5. .....
6. .....

Record the names of the foods volunteered by R on page 8 of the questionnaire beside each appropriate category. This information can be taken from the numbered cards.

Dispose of all the cards on the floor of your car.

APPENDIX B.

DIMENSIONS USED BY CONSUMERS TO EVALUATE FOODS

eat because necessary in diet - eat for enjoyment or variation

essential in the diet - not essential in the diet

high in food value - low in food value

high in protein content - low in protein content

high in carbohydrate content - low in carbohydrate content

high in vitamin content - low in vitamin content

high in mineral content - low in mineral content

high in sugar - low in sugar*

safe to eat - not safe to eat

highly processed - less processed

artificial - natural

fattening - not fattening

requires preparation before eating - ready to eat, no preparation required

easy to prepare - hard to prepare

many different ways to prepare (versatile) - not many ways to prepare (not versatile)

like to prepare - don't like to prepare

special occasion food - basic, everyday food

food for a main meal - food for a snack

a complete meal in itself - only part of a meal

generally eat at home - eat out

expensive - inexpensive

get more food value for the money - get less food value for the money

like - don't like

most people like this food - only some people like this food

eat often - eat seldom

have tasted - have never tasted

buy often - never buy

popular in my family - unpopular in my family

more familiar with - less familiar with

stores well - does not store well

left-overs, can be used for another meal - serve only once*

good variety available in this product - not much variety available in this product

always good quality - quality varies from week to week

easy to buy - requires much time and effort to buy

can be frozen and kept on hand - does not freeze well

no smell - has a smell

everyday family food - good for entertaining guests

ethnic food - common food (doesn't come from a definite nationality)

looks appetizing in the store - does not look appetising in the store

should be offered as a "special" often - should not be offered as a "special"

good for a baby - not good for a baby

meat is lean - meat is fat

always available - seldom available

DIMENSIONS USED BY CONSUMERS TO EVALUATE FOOD STORES

foods are fresh - foods lack freshness

foods have home-made quality - foods have commercial quality

good quality fresh fruits and vegetables - poor quality fresh fruits and vegetables

fruits and vegetables are fresh - fruits and vegetables are not fresh

good quality meat - poor quality meat

home-style processed meats - factory processed meats

well-trimmed meat - meat not well-trimmed

good bakery products - poor bakery products

sells only food - sells other items as well as food

convenient, located with other shopping facilities - grocery store only

greater selection of meat cuts - less selection of meat cuts

wide variety of items - less variety

has many popular brands - has less popular brands

has house brands - no house brands

in-store bakery - no in-store bakery

carries all basic food needs - carries only specialty and imported foods

close to my home - far away from my home

limited hours - convenient hours, open more often

more parking space - less parking space

clean - less clean

shop for bargains - shop regularly

shop regularly - shop for convenience, for forgotten items, or after regular hours

shop regularly - shop for special occasions

expensive meats - less expensive meats

high prices - reasonable prices

nice atmosphere for shopping - not a nice atmosphere for shopping

the customer is pressured to buy - the customer is not pressured to buy

private ownership - corporate ownership

personal service - impersonal service

takes longer to get waited on - takes less time to get waited on

check-out slow - check-out fast and efficient

like appearance of the store - don't like appearance of the store

store has an individual character in its appearance	-	looks the same as any other store in its chain

DIMENSIONS USED BY CONSUMERS TO EVALUATE

SECTIONS OF FOOD STORES

attractive display - unattractive display

the nice display tempts you to buy things - you buy only what you need*

roomy - crowded (cluttered)

well-organized display - disorganized display

has staff to serve customers - no staff to serve customers

limited selection - wide selection

often has bargains (specials) - seldom has bargains (specials

shop regularly - shop occasionally

more natural, health foods - not as natural, health foods

smells good - smells bad

interesting - dull, boring

prices high in supermarket compared to other stores - prices reasonable in supermarket

don't buy in a supermarket - do buy in a supermarket

expect to find in a food store - don't expect to find in a food store

daily changeover of fresh foods - no daily changeover

must package and weigh food yourself - don't have to

can buy small portions for one person - can buy only family-sized portions

always go back to the store because this section is excellent - this section doesn't influence my choice of stores*

*Dimensions denoted by an asterisk were not included on the basis of the panel analysis. Rather, they were retained due to the researcher's opinion that these were unique dimensions not represented in the panel's final list and warranted further study.

APPENDIX C

INSTRUCTIONS TO PANELISTS

As an introduction to your role as a panelist, you have already completed the interview schedule which was used to determine the dimensions used by consumers to evaluate foods, and food stores. You will recall that there were two parts dealing with food stores. In one part you made comparisons between food stores. In the other part you made comparisons between sections within a food store.

In this booklet, you will find a list of the responses given by consumers in the survey. As you look through the lists, you will see that, many times, responses differ only slightly and are probably different expressions of a single dimension. We wish to reduce the list so that each idea is expressed only once. This will be done by considering all expressions which reflect each dimension and choosing the best one. This "best expression" will be chosen to express the dimension in a way which will be easy to understand and meaningful to the majority of consumers. You may feel that you can formulate a "best expression" which would be more suitable than any of those given by the respondents in this survey.

The categorization of the list is completely arbitrary, and was done for your convenience. In a sense, one step of your task has already been performed, since dimensions which

appear to be similar are drawn together into categories.

This does not mean that all responses within one category express only one idea. In fact you may, in some cases, decide that all the responses in a category are unique. Then all must be retained, although you may wish to formulate a "best expression" for some, rather than retaining them in the original form. You may also decide that responses from <u>different categories</u> are expressions of the same dimension.

In other words, the categorization is done simply to avoid the chore of flipping from page to page to find similar ideas. Feel free to manipulate the categories to suit yourself.

To summarize, your task is as follows:

1) Identify responses which are repetitious of dimensions already given, and choose the "best expression" from among these dimensions. You may wish to formulate your own "best expression."

2) Identify any responses which express more than one dimension. For example, if I was comparing bread, cookies, and orange juice, I could respond as follows:

Bread and Cookies - These foods are fattening.

Orange Juice - You can drink this food.

My response would then be listed as:

fattening - can drink this food

Thus two dimensions are given in a single response:

fattening - not fattening

can drink this food - can eat this food

3) For responses which contain more than one dimension, choose or formulate a "best expression" for each dimension, if none is already given in the list.

4) Return your list of "best expressions" to the researcher.